

**Notice of Allowability**

Application No.

09/715,891

Applicant(s)

WEBB ET AL.

Examiner

Art Unit

F. Pierre VanderVegt

1644

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to papers filed February 14, 2005.
2. ☒ The allowed claim(s) is/are 61-67, 69-71, 73, 75, 77-82, 149 and 157-161.
3. ☒ The drawings filed on 21 January 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>04272005</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                                    |
|   | 9. <input type="checkbox"/> Other _____  |

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### EXAMINER'S AMENDMENT

1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment that places this application in condition for allowance. During a telephone conversation conducted on April 25, 2005, Michael McCarthy requested an extension of time for 1 MONTH(S) and authorized the Director to charge Deposit Account No. 19-0962 the required fee of \$60.00 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. The application has been amended as follows:

#### IN THE CLAIMS:

This listing of claims in the Examiner's amendment will replace all prior versions, and listings, of claims in the application:

Claims 1-60 (canceled)

Claim 61 (currently amended): A method of producing an insect synthetic antigen presenting cell comprising:

- a) transforming the cell with an expressible MHC class II  $\alpha$ -chain gene operably linked to a first promoter in a vector capable of expressing an MHC class II  $\alpha$ -chain;
- b) transforming the cell with an expressible MHC class II  $\beta$ -chain gene operably linked to a second promoter in a vector capable of expressing an MHC class II  $\beta$ -chain; and
- c) transforming the cell with a first expressible accessory molecule gene operably linked to a third promoter in a vector capable of expressing an accessory molecule, wherein the accessory molecule is selected from the group consisting of: a B7.1, a B7.2, an ICAM-1, an ICAM-2, an ICAM-3, an LFA-3, a Fas ligand, ~~or~~ and a CD70.

Claim 62 (previously presented): The method of claim 61 wherein the cell lacks a gene coding for at least one of the  $\alpha$ -chain, the  $\beta$ -chain and the accessory molecule genes prior to transformation.

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Claim 63 (original): The method of claim 61 further comprising the step of transforming the cell with an expressible antigen processing assisting gene operably linked to a fourth promoter in a vector capable of expressing an antigen processing assisting molecule.

Claim 64 (original): The method of claim 61 wherein the  $\alpha$ - and  $\beta$ - chain genes are of human origin.

Claim 65 (original): The method of claim 61 wherein at least one promoter is inducible.

Claim 66 (original): The method of claim 61 wherein the  $\alpha$ -,  $\beta$ - and accessory molecule genes are present in the same vector.

Claim 67 (original): The method of claim 61 wherein the  $\alpha$ -,  $\beta$ - and accessory molecule genes are present in separate vectors.

Claim 68 (canceled)

Claim 69 (previously presented): The method of claim 61 wherein the insect cell is selected from the group consisting of Spodoptera and Drosophila.

Claim 70 (original): The method of claim 61 further comprising the step of transforming the cell with an expressible neomycin resistance gene operably linked to a vector.

Claim 71 (currently amended): The method of claim 61 wherein the accessory molecule gene encodes a costimulatory molecule selected from the group consisting of a B7.1 and a B7.2.

Claim 72 (canceled)

Claim 73 (currently amended): The method of claim 61 wherein the accessory molecule gene encodes an adhesion molecule selected from the group consisting of an ICAM-1, an ICAM-2, an ICAM-3 and an LFA-3.

Claim 74 (canceled)

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Claim 75 (currently amended): The method of claim 61 wherein the accessory molecule gene encodes a survival molecule selected from the group consisting of a Fas ligand and a CD70.

Claim 76 (canceled)

Claim 77 (currently amended): The method of claim 61 further comprising the step of transforming the cell with a gene for a second accessory molecule, wherein the second accessory molecule is selected from the group consisting of: a B7.1, a B7.2, an ICAM-1, an ICAM-2, an ICAM-3, an LFA-3, a Fas ligand, and a CD70.

Claim 78 (currently amended): The method of claim 77 wherein the first accessory molecule is a costimulatory molecule selected from the group consisting of a B7.1 and a B7.2 and the second accessory molecule is an adhesion molecule selected from the group consisting of an ICAM-1, an ICAM-2, an ICAM-3, and an LFA-3.

Claim 79 (currently amended): The method of claim 77 wherein the first accessory molecule is a costimulatory molecule selected from the group consisting of a B7.1 and a B7.2 and the second accessory molecule is an survival molecule selected from the group consisting of a Fas ligand and a CD70.

Claim 80 (currently amended): The method of claim 77 wherein the first accessory molecule is a survival molecule selected from the group consisting of a Fas ligand and a CD70 and the second accessory molecule is an adhesion molecule selected from the group consisting of an ICAM-1, an ICAM-2, an ICAM-3, and an LFA-3.

Claim 81 (currently amended): The method of claim 77 further comprising the step of transforming the cell with a gene for a third accessory molecule, wherein the third accessory molecule is selected from the group consisting of: a B7.1, a B7.2, an ICAM-1, an ICAM-2, an ICAM-3, an LFA-3, a Fas ligand, and a CD70.

Claim 82 (currently amended): The method of claim 81 wherein the first accessory molecule is a costimulatory molecule selected from the group consisting of a B7.1 and a B7.2, the second accessory

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molecule is an adhesion molecule selected from the group consisting of an ICAM-1, an ICAM-2, an ICAM-3, and an LFA-3, and the third accessory molecule is a survival molecule selected from the group consisting of a Fas ligand and a CD70.

Claims 83-148 (canceled)

Claim 149 (currently amended): The method of claim 61, wherein the accessory molecule gene encodes one or more of a costimulatory molecule selected from the group consisting of a B7.1 and a B7.2, an adhesion molecule selected from the group consisting of an ICAM-1, an ICAM-2, an ICAM-3, and an LFA-3, or a survival molecule selected from the group consisting of a Fas ligand and a CD70.

Claims 150-156 (canceled)

Claim 157 (currently amended): The method of claim 69, wherein the accessory molecule gene encodes one or more of a costimulatory molecule selected from the group consisting of a B7.1 and a B7.2, an adhesion molecule selected from the group consisting of an ICAM-1, an ICAM-2, an ICAM-3, and an LFA-3, or a survival molecule selected from the group consisting of a Fas ligand and a CD70.

Claim 158 (currently amended): The method of claim 69, wherein the accessory molecule gene encodes a costimulatory molecule selected from the group consisting of a B7.1 and a B7.2.

Claim 159 (currently amended): The method of claim 69, wherein the accessory molecule gene encodes an adhesion molecule selected from the group consisting of an ICAM-1, an ICAM-2, an ICAM-3, and an LFA-3.

Claim 160 (currently amended): The method of claim 69, wherein the accessory molecule gene encodes a survival molecule selected from the group consisting of a Fas ligand and a CD70.

Claim 161 (previously presented): The method of claim 69, wherein the accessory molecule gene encodes one or more of a B7.1, a B7.2, an ICAM-1, an ICAM-2, an ICAM-3, an LFA-3, a Fas ligand, or a CD70.

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Claims 162-164 (canceled)


*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Pierre VanderVegt whose telephone number is (571) 272-0852. The examiner can normally be reached on M-Th 6:30-4:00 and Alternate Fridays 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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April 27, 2005

  
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